

**24 Month Study Modeling Assumptions
Partial Domestic Use in CY 2004**

24-Jun-03

PPRs: For 2003, it is estimated that the PPR use will be at 13,100 af. We assumed the 2003 estimate for 2004. Under the draft QSA, IID and CVWD will supply up to 14,500 af for PPR use.

MWD: Amount of surplus to MWD under the Partial Domestic Surplus is computed as:
1.212 MAF minus MWD's basic apportionment minus the amount of use by PPRs > 14,500 af minus the offset for other sources of surplus water (offstream groundwater withdrawals or other options). Per the Interim Surplus Criteria and draft QSA, MWD's basic apportionment is 550,000 af

Amount of MWD Surplus = 1.212 MAF - Basic Apportionment - amount of PPRs > 14,500 AF - Offset

The offset amounts in acre-feet over the next several years are:

| | | |
|---|------|--------|
| | 2002 | 400000 |
| | 2003 | 380000 |
| → | 2004 | 360000 |
| | 2005 | 340000 |
| | 2006 | 320000 |

Therefore the amount of surplus in MAF for MWD in 2004 under a partial domestic determination is

$$= 1.212 - 0.550 - 0 - 0.360$$

$$= \mathbf{0.302}$$

MWD's Partial Domestic entitlement in MAF for 2004 is the basic apportionment plus the surplus amount

$$= \mathbf{0.852}$$

Cal-Ag: According to the Interim Surplus Guidelines, the Californai Agricultural usage plus the 14,500 of PPR use must be reduced through the interim period. The Cal-Ag use plus the PPR use would need to be at or below the benchmark amounts for each year listed below. We assume that the benchmarks are linearly interpolated between the intervening years.

With linear interpolation, the benchmark quantities are (the bold values are the original benchmark quantities):

| Date | Quantity |
|-------------|-------------|
| 2003 | 3.74 |
| → 2004 | 3.71 |
| 2005 | 3.67 |
| 2006 | 3.64 |
| 2007 | 3.6 |
| 2008 | 3.57 |
| 2009 | 3.53 |
| 2010 | 3.51 |
| 2011 | 3.49 |
| 2012 | 3.47 |

The Cal-Ag use entitlement in MAF in 2004 under a partial domestic surplus determination is assumed to be

$$= \text{Benchmark Quantity} - \text{PPR estimated use (up to 14,500 af)}$$

$$= 3.71 - 0.0131$$

$$= \mathbf{3.6969}$$

These assumptions are for modeling purposes only and have been detailed here to provide a comprehensive understand of the inputs to the model.